AquaticFitnessSystems®

OWNER'S GUIDE

Your Product Information

Please gather the following important information about your Dimension One Aquatic Fitness System (AFS) and register your product online at www.D1.com. Registering your product establishes your warranty, protects your product and helps us develop new and better products.

My Aquatic Fitness System

Model Name: _____ **Serial Number:** _____

Date Purchased: _____ **Date Installed:** _____

Gallons/Liters: _____

Notes: _____

_____

_____

Dealer Information:

Dealer's Name: _____

Address: _____

City: _____ **State, Zip:** _____

Telephone: _____ **Fax:** _____

Table of Contents

IMPORTANT SAFETY INSTRUCTIONS 1
IMPORTANT SAFETY INSTRUCTIONS (CANADA) (CSA SAFETY INFORMATION) 2
HYPERTHERMIA 3
SAFETY DO'S AND DON'TS 3
DANGER SIGN 4
USING THE "POOL-SIDE" CONTROL PANEL 8
PROGRAMMING THE FILTER CYCLE 10

USING THE SPA SIDE OF THE "DUAL TEMP" MODEL 12

OPERATION OF THE SPA 12
MESSAGES THAT APPEAR IN THE DISPLAY WINDOW 14

HYDROSPORT™ SWIM SYSTEM 17

IMPORTANT SAFETY INSTRUCTIONS 17
USING THE SWIM TETHER 17
USING THE SWIM KICK BAR 18
USING THE SWIM JETS 18

OPTIONAL HYDROSPORT™ ROWING SYSTEM 19

INSTALLING THE ROWING SYSTEM 19
ROWING FOR THE FIRST TIME 20
CONNECTING THE HYDROSPORT™ BODY BELT 21
CONNECTING THE HYDROSPORT™ D-HANDLES 21
CONNECTING THE HYDROSPORT™ BAR STRAPS 21

HYDROSPORT™ EXERCISE BARS 22

INSTALLING THE STATIONARY EXERCISE BARS 22
HYDROSPORT™ AQUATIC FITNESS BAR 22
INSTALLING THE AQUATIC FITNESS BAR 22

ROUTINE EQUIPMENT MAINTENANCE 23

DRAINING YOUR SYSTEM 23
FILTER CLEANING 23
LIGHT REPLACEMENT 23
SURFACE CARE 24
SPECIAL COLD WEATHER INSTRUCTIONS 24

TROUBLESHOOTING GUIDE 26

HEATING SYSTEM 26
ELECTRICAL SYSTEM 26
WATER SYSTEM 26
SELF-DIAGNOSTIC SYSTEM 27

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

Installation and use of this equipment requires the user to always follow safety precautions including:

- **Risk of Accidental Drowning.** Exercise extreme caution to prevent unsupervised children going near the Aquatic Fitness System. Children should not use the Aquatic Fitness System without adult supervision.
- **Risk of Serious Injury or Death.** If you need to replace the suction fitting or pump make sure that the flow rates are compatible. Never operate the Aquatic Fitness System if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.
- **Risk of Electric Shock.** Install at least 5 FEET (1.5 m), from all metal surfaces. As an alternative, the Aquatic Fitness System may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum No. 8 AWG (8.4 mm^2) solid copper conductor attached to the wire connector on the grounding lug, inside the equipment compartment on the equipment can.
- **Risk of Electric Shock.** Do not permit any electrical appliance, such as a light, telephone, radio, television, etc. within 5 feet (1.5 m) of the Aquatic Fitness System. Never operate any electrical appliances from inside the Aquatic Fitness System or when you are wet.
- **Danger.** The electrical supply for this Aquatic Fitness System must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with section 680-42 of the National Electrical Code, ANSI/NFPA 70-1993. The disconnect must be readily accessible and visible to the Aquatic Fitness System occupant but installed at least 5 feet (1.5 m), from the Aquatic Fitness System water.
- **Danger.** A grounding wire connector is provided on this Aquatic Fitness System to connect a minimum No. 8 AWG (8.4 mm^2) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the Aquatic Fitness System.
- **Risk of Electric Shock**. Do not attempt to remove the light housing cover without lowering the water level below the light housing cover.
- **To Reduce the Risk of Injury:** The water in the Aquatic Fitness System should never exceed 104° F (40° C). Water temperatures between 100° F (38° C) and 104° F (40° C) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when Aquatic Fitness System use exceeds 10 minutes.
- **To Reduce the Risk of Injury:** Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit Aquatic Fitness System water temperatures to 100° F (38° C).
- **To Reduce the Risk of Injury:** Before entering the Aquatic Fitness System, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices may vary as much as +/- 5° F (2° C).
- **To Reduce the Risk of Injury:** The use of alcohol, drugs, or medication before or during Aquatic Fitness System use may lead to unconsciousness with the possibility of drowning.
- **To Reduce the Risk of Injury:** Pregnant women, the elderly, infants, or persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes, should consult a physician before using the Aquatic Fitness System. People with infectious diseases should not use an Aquatic Fitness System.
- **To Reduce the Risk of Injury:** Persons using medication should consult a physician before using the Aquatic Fitness System since some medication may induce drowsiness, while other medication may affect heart rate, blood pressure, and circulation.
- Observe a reasonable time limit when using the Aquatic Fitness System. Long exposures at high temperatures can cause high body temperature (hyperthermia, see pg. 3). Enter and exit the Aquatic Fitness System slowly. Wet surfaces can be very slippery.
- Proper chemical maintenance of Aquatic Fitness System water is necessary to maintain safe water and prevent possible damage to Aquatic Fitness System components.
- Use the cover straps and clip tie downs to secure the cover when not in use. This will help discourage unsupervised children from entering the spa and keep the spa cover secure in high wind conditions. There is no guarantee that the cover, clip tie downs, or the actual locks will prevent access to the Aquatic Fitness System.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS (CANADA) (CSA SAFETY INFORMATION)

In addition to the preceding safety instructions, Canadian owners should read and understand the following information from the Canadian Safety Association:

READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY

- A green colored terminal or a terminal marked G, GR, Ground, Grounding, or the symbol * is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment.
    - IEC Publication 417, Symbol 5019.
- At least two lugs marked "BONDING LUGS" are provided on the external surface or on the inside of the supply terminal box/compartment. To reduce the risk of electric shock, connect the local common bonding grid in the area of the hot tub or Aquatic Fitness System to these terminals with an insulated or bare copper conductor not smaller than No. 6 AWG.
- All field-installed metal components such as rails, ladders, drains or other similar hardware within 3 meters of the Aquatic Fitness System or hot tub shall be bonded to the equipment grounding bus with copper conductors not smaller than No. 6 AWG.
- Children should not use Aquatic Fitness Systems or hot tubs without adult supervision.
- **AVERTISSEMENT:** NE PAS LAISSER LES ENFANTS UTILISER UNE CUVE DE RELAXATION SANS SURVEILLANCE.
- Do not use Aquatic Fitness Systems or hot tubs unless all suction guards are installed to prevent body and hair entrapment.
- **AVERTISSEMENT:** POUR ÉVITER QUE LES CHEVEUX OU UNE PARTIE DU CORPS PUISSENT TRES ASPIRÉS, NE PAS UTILISER UNE CUVE DE RELAXATION SI LES GRILLES DE PRISE D'ASPIRATION NE SONT PAS TOUTES EN PLACE.
- People using medications and/or having adverse medical history should consult a physician before using an Aquatic Fitness System or hot tub.
- **AVERTISSEMENT:** LES PERSONNES QUI PRENNENT DES MÉDICAMENTS OU ONT DES PROBLÈMES DE SANTÉ DEVRAIENT CONSULTER UN MÉDECIN AVANT D'UTILISER USE CUVE DE RELAXATION.
- People with infectious diseases should not use an Aquatic Fitness System or hot tub.
- **AVERTISSEMENT:** LES PERSONNES ATTEINTES DE MALADIES INFECTIEUSES NE DEVRAIENT PAS UTILISER UNE CUVE DE RELAXATION.
- To avoid injury, exercise care when entering or exiting the Aquatic Fitness System or hot tub.
- **AVERTISSEMENT:** POUR ÉVITER DES BLESSURES, USER DE PRUDENCE EN ENTRANT DANS UNE CUVE DE RELAXATION ET E SORTANT.
- Do not use drugs or alcohol before or during the use of the Aquatic Fitness System or hot tub to avoid unconsciousness and possible drowning.
- **AVERTISSEMENT:** POUR ÉVITER L'ÉVANOUISSEMENT ET LA NOYADE EVENTUELLE, NE PRENDRE NI DROGUE NI ALCOOL AVANT D'UTILISER UNE CUVE DE RELAXATION NI QUAND ON S'Y TROUVE.
- Pregnant or possibly pregnant women should consult a physician before using an Aquatic Fitness System or hot tub.
- **AVERTISSEMENT:** LES FEMMES ENCEINTES, QUE LEUR GROSSESSE SOIT CONFIRMÉE OU NON, DEVRAIENT CONSULTER UN MÉDECIN AVANT D'UTILISER UNE CUVE DE RELAXATION.
- Water temperature in excess of 38° C may be injurious to your health.
- **AVERTISSEMENT:** IL PEUT TRES DANGEREUX POUR LA SANTÉ DE SE PLONGER DANS DE L'EAU À PLUS DE 38°C.
- Before entering the Aquatic Fitness System or hot tub, measure the water temperature with an accurate thermometer.
- **AVERTISSEMENT:** AVANT D'UTILISER UNE CUVE DE RELAXATION MESURER LA TEMPÉRATURE DE L'EAU À L'AIDE D'UN THERMOMÈTRE PRÉCIS.
- Do not use an Aquatic Fitness System or hot tub immediately following strenuous exercise.

- **AVERTISSEMENT:** NE PAS UTILISER UNE CUVE DE RELAXATION IMMEDIATEMENT APRÈS UN EXERCICE FATIGANT.
- Prolonged immersion in an Aquatic Fitness System or hot tub may be injurious to your health.
- **AVERTISSEMENT:** L'UTILISATION PROLONGÉE D'UNE CUVE DE RELAXATION PEUT TRES DANGEREUSE POUR LA SANTÉ.
- Do not permit electric appliances (such as a light, telephone, radio, television, etc.) within 1.5m of this Aquatic Fitness System or hot tub.
- **AVERTISSEMENT:** NE PAS PLACER D'APPAREIL ÉLECTRIQUE (LUMINAIRE, TÉLÉPHONE, RADIO, TÉLÉVISEUR, ETC.) À MOINS DE 1.5 M DE CETTE CUVE DE RELAXATION.
- Maintain water chemistry in accordance with manufacturer's instructions.
- **ATTENTION:** LA TENEUR DE L'EAU EN MATIERÈS DISSOUTES DOIT TRE CONFORME AUX DIRECTIVES DU FABRICANT.
- The use of alcohol or drugs can greatly increase the risk of fatal hyperthermia in hot tubs and Aquatic Fitness Systems.
- **AVERTISSEMENT:** LA CONSOMMATION D'ALCOOL OU DE DROGUE AUGMENTE CONSIDÈRABLEMENT LES RISQUES D'HYPERTHERMIE MORTELLE DANS UNE CUVE DE RELAXATION.

SAVE THESE INSTRUCTIONS

Hyperthermia

Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of (98.6˚ F, 37° C). The symptoms of hyperthermia include dizziness, drowsiness, lethargy, and fainting. The effects of hyperthermia include:

- Failure to perceive heat,
- Failure to recognize the need to exit the spa,
- Unawareness of impending hazard,
- Fetal damage in pregnant women,
- Physical inability to exit spa,
- Unconsciousness resulting in the danger of drowning.

Safety Do's and Don'ts

DO

- **DO** read all operating instructions.
- **DO** read, understand and follow all Safety, Danger and Warning instructions before use.
- **DO** test water temperature with your hand before entering.
- **DO** keep the cover down when the spa or AFS remains unused.

DO NOT

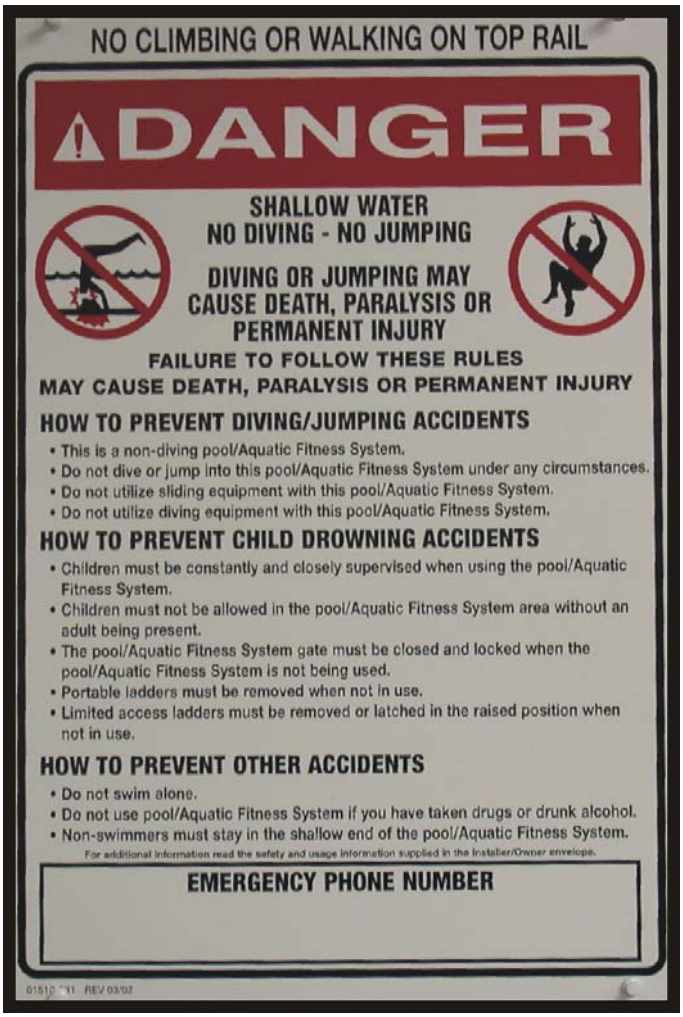
- **DO NOT** block or sit on the filter recess area.
- **DO NOT** allow horseplay or unsupervised use of your AFS.
- **DO NOT** allow anyone to tamper or play with any of the safety or suction fittings of your spa or AFS system.

DANGER SIGN

Every AFS has a warning sign that outlines safety precautions. Read and familiarize yourself with all warnings listed on this sign. Make the sign visible and accessible to all AFS users.

Replacement signs may be obtained from:

Dimension One Spas
2611 Business Park Drive
Vista, CA 92081


NO CLIMBING OR WALKING ON TOP RAIL
DANGER
SHALLOW WATER
NO DIVING - NO JUMPING
DIVING OR JUMPING MAY CAUSE DEATH, PARALYSIS OR PERMANENT INJURY
FAILURE TO FOLLOW THESE RULES
MAY CAUSE DEATH, PARALYSIS OR PERMANENT INJURY
HOW TO PREVENT DIVING/JUMPING ACCIDENTS
• This is a non-diving pool/Aquatic Fitness System.
• Do not dive or jump into this pool/Aquatic Fitness System under any circumstances.
• Do not utilize sliding equipment with this pool/Aquatic Fitness System.
• Do not utilize diving equipment with this pool/Aquatic Fitness System.
HOW TO PREVENT CHILD DROWNING ACCIDENTS
• Children must be constantly and closely supervised when using the pool/Aquatic Fitness System.
• Children must not be allowed in the pool/Aquatic Fitness System area without an adult being present.
• The pool/Aquatic Fitness System gate must be closed and locked when the pool/Aquatic Fitness System is not being used.
• Portable ladders must be removed when not in use.
• Limited access ladders must be removed or latched in the raised position when not in use.
HOW TO PREVENT OTHER ACCIDENTS
• Do not swim alone.
• Do not use pool/Aquatic Fitness System if you have taken drugs or drunk alcohol.
• Non-swimmers must stay in the shallow end of the pool/Aquatic Fitness System.
For additional information read the safety and usage information supplied in the Installer/Owner envelope.
EMERGENCY PHONE NUMBER

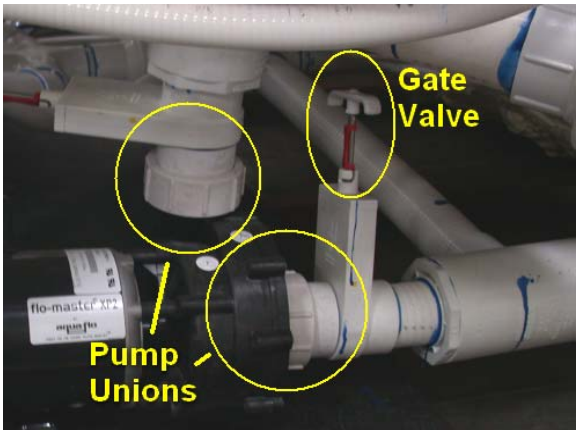
Initial Startup

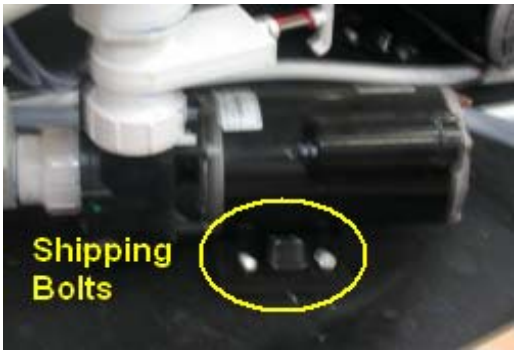
Go over the initial startup with your dealer before they begin the installation of your spa.

IMPORTANT: About your GFCI Circuit Breaker — The GFCI (Ground Fault Circuit Interrupter — also called a "circuit breaker") automatically shuts off power to the Aquatic Fitness System in case of an electrical malfunction. You must have a GFCI installed according to your local building codes in an electrical power box near your system. The GFCI must be OFF before you fill your Aquatic Fitness System with water. You can manually turn off power to the system any time by moving the switch into the OFF position. After turning off the GFCI check for a blank control panel screen which means the power is off. To turn power back on move the switch to the ON position.

If you have questions about the location or operation of your GFCI, ask your dealer for clarification. DO NOT use your system unless you understand the operation of the GFCI.

1. Locate the equipment compartment, beneath the steps of the AFS. Have your dealer familiarize you with the equipment components.
2. Use a Phillips screwdriver to remove the equipment compartment screws. Open the compartment.
3. Check the pump unions (see photo) for hand-tightness and to prevent the possibility of leakages.





4. Check near the pumps to make sure the gate valve has the red safety clips in place which means that the gate valve is open (see photo above).
5. Remove the two front and two rear shipping bolts on each pump mount. (See photo, left).

Two-filter models

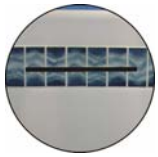
Three-filter (Dual Temp)

6. Remove the filter baskets and the foam blocks securing the filters.

7. Remove one of the two filters from the pool side of the system. (If you have the Dual-Temp model with separate built-in spa, also remove the filter from the spa side). (If you need more details on how to remove the filters, see the Filter Cleaning section, pg. 23)

8. Ensure that the hose bibs are closed before filling the spa. The hose bibs are connected to hoses in the equipment compartment. Turn the handles on the side of the valve perpendicular to the pipe to close the hose bibs. The picture at right shows an open hose bib.

9. Place a garden hose in the empty filter canister to fill the system. Fill the system until the water level reaches the center of the tile line.



10. After filling the system, return the filter to its basket. After the filter is in place, turn on the GFCI circuit breaker. The Display Window of the Pool will show the current water temperature.

NEVER run your spa's pumps without the filters in place. This can cause damage to the pumps.

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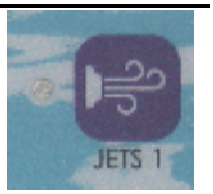
11. Prime the pumps by pushing the JETS 1 button once and letting it run for 30 to 45 seconds. To turn off, push it again. Repeat for the JETS 2 and JETS 3 buttons.



If the jets do not turn on, air is trapped in the plumbing lines. To eliminate the trapped air, turn the pumps on and off several times to force the trapped air through the pumps. If the jets still do not turn on, turn off the pumps and loosen the pump unions slightly to let any trapped air escape. Re-tighten the pump unions and turn the pumps on again. Turn the pumps on and off several times until jets function properly.

12. Press the Warmer (UP) Button and Cooler (DOWN) Buttons until your desired water temperature appears. The Display Window shows your Set Temperature for five seconds before reverting back to the current water temperature.

If you have the Dual-Temp model with built-in spa, likewise set the spa temperature using the + and – buttons. See the spa programming section later in this manual for more details. (pg. 15)

The Display Window does not allow you to set the temperature above 104° F (≅40°C). However, if the water temperature exceeds 104° F (≅40° C), the display will show the actual temperature. **Never get in water if the temperature exceeds 104° F (≅40° C).**

13. While heating the spa, inspect the pump unions and plumbing fittings for leaks. When you have finished the inspection, you can reinstall the equipment compartment panel.

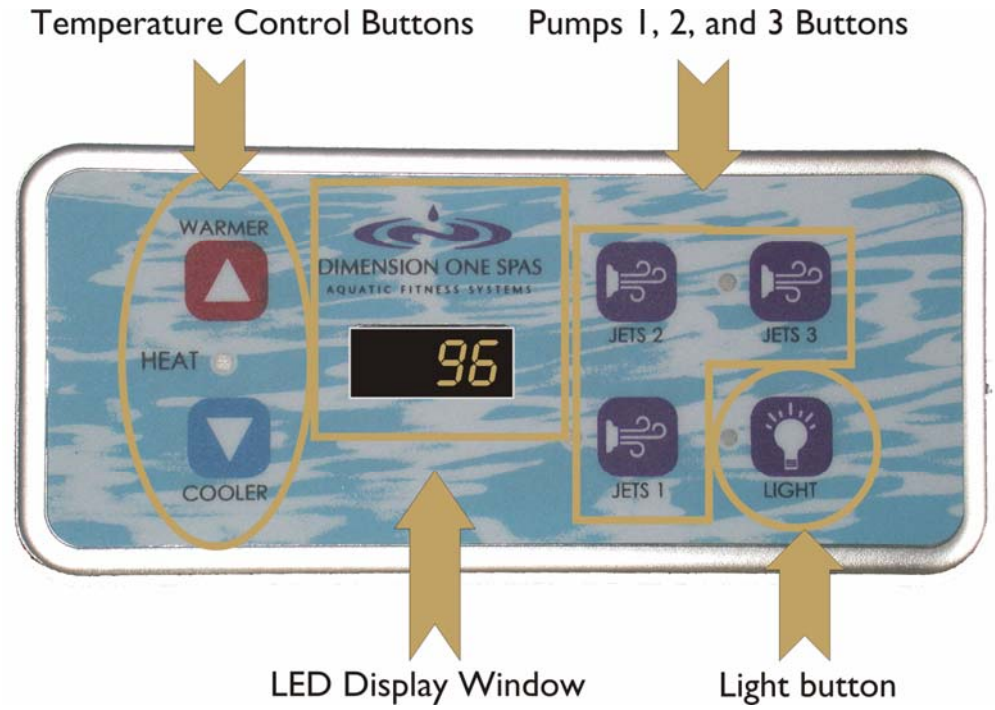
14. After completing the above steps, see the Water Care Guide (provided separately) to ensure proper water chemistry.

15. Place the thermal cover on your Aquatic Fitness System to conserve energy and keep it ready for use.

Using Your Aquatic Fitness System

Using the "Pool-Side" Control Panel

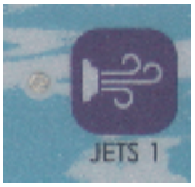
Your Aquatic Fitness System has a Control Panel on the top side to control the Pool Functions. (If you have the "Dual Temp" model the spa-side functions are controlled by a separate panel, pg. 12).



The Display Window

The Display Window shows the current water temperature, except when you adjust the temperature. Five seconds after you finish setting the desired temperature, the Display Window reverts back to the current temperature.

Jets 1 Button

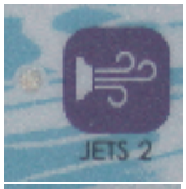


Pressing the Jets 1 button once turns Pump 1 on low speed. A second press turns it to High Speed. A third press turns the pump off, unless the pump has been automatically activated during a heating cycle – in which case a third press returns the pump to Low Speed for heating. A built-in timer automatically shuts the pump off after 20 minutes of operation. The Jets 1 Indicator light (beside the button) will glow while the pump is running.

Pump 1 powers the Swim Jets and/or HydroTherapy Jets**.** The diverter valve (see left) controls which set of jets gets the water, and how much flows to each set. (Note: If you have the Dual Temp model with built-in spa, the spa side has a diverter valve but the swim side does not.)

Pump 1 also runs on low speed during all filtering and heating cycles. During the filter cycle the indicator light for Jets 1 glows. If you manually press JETS 1 during a filter cycle, that particular filter cycle disables to give you control of the jet pump.

Jets 2 and Jets 3 Buttons



Pumps 2 and 3 provide high-volume water flow to the Swim Jets.

Press the appropriate button once to turn on Pump 2 or 3. The pumps work independently, giving you flexible control over the amount of water flowing from the Swim Jets. Pressing either button a second time turns that pump off.

A built-in timer will shut the pump(s) off after 20 minutes of operation unless you manually shut them off earlier. The Jets 2 or Jets 3 Indicator light beside the button will glow when that pump is running.

If your system was installed with less than the maximum recommended electrical service for heat and pumps, the heater will turn off when the pumps run at high speed. If you have the maximum electrical service, then you can continue to heat your water while running the pumps at high speed. Ask your dealer if you have questions about your electrical service.

Light Button

Push the **LIGHT Button** once to turn on the spa light in Color Change mode. In Color Change mode, the light will continuously cycle through Red, Green, Blue, White and Magenta. To switch to Color Select mode, which holds the current color, turn the light off by pushing the **LIGHT Button**, then push the **LIGHT Button** again to turn the light back on in Color Select mode. Alternately, you can hold the **LIGHT Button** until you see the light flash off and on to turn on the light and start in Color Select mode.

If you have more than one light in your spa and the lights are no longer synchronized, power off the lights for 3 to 9 seconds. When powered on, all lights will be resynchronized and reset to Color Change mode.

Programming the Filter Cycle

The AFS comes with six pre-programmed filter cycles (**F1**-**F6**) and two lockout modes (**L1** & **L2**). Three of the six filter cycles run in Standard Mode and the other three cycles run in Economy Mode.

To enter the programming mode, press and hold both the WARMER and COOLER buttons at the same time for 3 seconds. The display indicates the filter mode with a code (**F1** indicates Filter Mode 1, etc.).

Use the WARMER and COOLER buttons to scroll up or down through the filtering modes. The filter cycles look as follows:

- Standard Mode: **F1**, **F2**, **F3**
- Economy Mode: **F4**, **F5**, **F6**
- Lockout Mode: **L1**, **L2**

Selecting a Filter Cycle

Standard and Economy Mode

In the standard modes your system heats whenever the water temperature drops to 2°F (≅1°C) below your set temperature, and continues heating until the water is 2°F (≅1°C) above your set temperature. In Standard Mode, heating the water remains independent of the filter cycles.

In economy mode, the water only heats when the filter runs during a normal filtration cycle.

After entering the filter programming mode press the WARMER (up) button or the COOLER (down) button until you see **F1**, **F2**, **F3**, **F4**, **F5** or **F6**.

F1: 2 hours of filtration 2 times a day. (Standard)
F2: 2 hours of filtration 3 times a day. (Standard)
F3: 2 hours of filtration 4 times a day. (Standard)
F4: 2 hours of filtration and heat 2 times a day. (Economy)
F5: 2 hours of filtration and heat 3 times a day. (Economy)
F6: 2 hours of filtration and heat 4 times a day. (Economy)

If you make no further changes for three (3) seconds, the system automatically stores your choice and exits the programming sequence.

If the display window displays **COL** or **ICE**, cool or ice conditions have been detected. These conditions override economy mode. The system heats as needed to prevent freezing damage, regardless of the filter cycle. For more information, see the Troubleshooting Guide (pg. 26).

Selecting a Lockout Mode

L1 – Pump Lockout – To prevent pumps from accidentally turning on while you clean the filters or do non-electrical service on your system, use the **L1** mode.

Start the programming sequence by pressing and holding both the WARMER and COOLER buttons for three (3) seconds. Press the WARMER (up) button or the COOLER (down) button until you see **L1**.

If you make no further changes for three (3) seconds, the system automatically stores your choice and exits the programming sequence. The temperature display flashes while you remain in this mode.

If the system was heating when you put it in lockout mode, the heater immediately turns off and the pumps run for thirty seconds, then turn off.

L2 – Panel Lockout – To prevent unauthorized use of you system, use the **L2** mode to lock the control panel.

Start the programming sequence by pressing and holding both the warmer and cooler buttons for three (3) seconds. Then press the WARMER (up) button or the COOLER (down) button until you see **L2**.

If you make no further changes for three (3) seconds, the system automatically stores your choice and exits the programming sequence. The temperature display flashes while you remain in this mode.

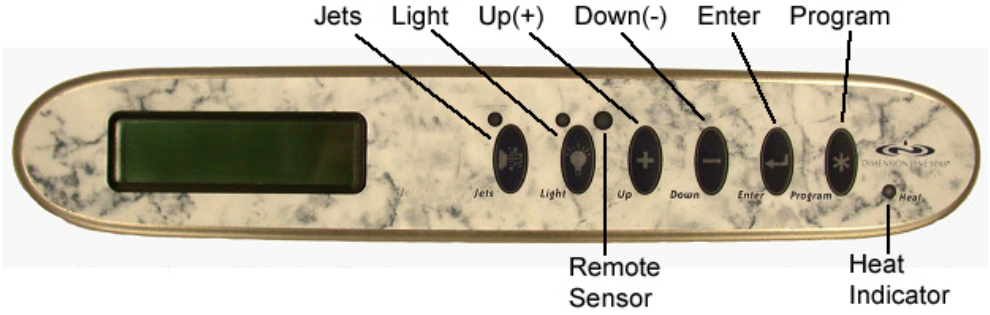
Note: While in **L2** lockout mode, the system will behave as if the filter cycle is set to **F1**.

Using the Spa Side of the "Dual Temp" Model

The functions described in this section refer only to the AquaFit 19DT, which features the separate built-in spa.

The "spa side" is separate from the "pool side." The water in the spa circulates through its own closed system. It contains a separate filter and heating system, and the water chemistry must be managed separately using the guidelines in the separate Water Care Guide.

Operation of the Spa



Display Window

The display window shows the current status of the spa. By default it shows the temperature.

JETS Button

When you push the JETS button :

- The jet pump activates.
- The jet indicator light glows.
- A swirl icon appears in the upper left corner of the display window. Its swirl speed indicates the pump's speed.

Pushing the JETS button once starts the pump on low speed. Pushing it a second time turns on high speed. Pushing it a third time turns the pump off.

A built-in timer will automatically shut the pump off after 30 minutes. You can reprogram this shut-off time. See the Programming section (pg. 15).

After the pump turns on, the pump speed appears, a status bar appears indicating the time remaining until shut-off. If your spa has multiple jet pumps, the shut-off cycle controls all of them. Pushing a JETS button will disable any concurrent filter cycle.

Flashing jets, lights or heat indicator lights denotes a problem with your spa. See the Troubleshooting Section for more details (pg. 24).

Light Button

The LIGHT button controls the lighting of your spa. See the Light control section (pg. 9).

Up (+) and Down (-) Buttons

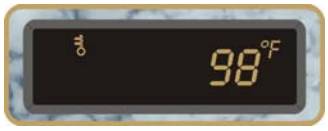
You can control the water temperature by using the **Up (+) and Down (-) Buttons**. The SET TEMPERATURE Icon appears in the lower right side of the Window to indicate that the temperature shown is a "target setting" and not the actual temperature. The Temperature Icon will appear at the top of the window if your new setting requires more heat.

Once the new temperature is set, the Display Window once again shows the actual spa water temperature. The spa will heat to the new temperature automatically.

Program Button

Push the **PROGRAM Button** to begin the process of programming, or reprogramming, the spa. See Programming the Spa Functions for details (pg. 15).

Heat Status Light



The Heat Status Light is illuminated whenever the heater is on. Additionally, a heat icon will also be displayed in the upper left corner of the Digital Display Window.

Dimension One Spas ICON (Logo)®

Push the Dimension One ICON button to see the time of day. If no other button is pushed within 5 seconds, the display reverts to the water temperature.

Battery Backup - The Dimension One Spas scrolling message center control panel has a battery back-up that will retain the time of day for 30 days without an active power source. The control panel also stores your custom programming commands for up to 40 years without power. This battery backup will not provide power to heat or operate the hot tub.

Messages that Appear in the Display Window

Overheat

DO NOT ENTER THE WATER when "**OH**" is displayed on the control system's Digital Display Window because the spa is in a high temperature condition. If this happens, remove the spa cover and allow the water to cool below 110° F (≅43.3° C). Turn off all power to the system to reset.

If the problem persists, contact your local Authorized Dimension One Spas Dealer, or authorized service center.

The overheat condition could be caused by excessive filtration. See the Troubleshooting Guide section for more information (pg. 26).

3 Flashing Lights

DO NOT ENTER THE WATER if you see 3 flashing LEDs on the Top Side Control. The system has detected a problem.

Check to see of your Digital Display Window is also displaying an Overheat Protection condition (**OH)**. If you have flashing lights and an **OH** in the display, your system has detected a high limit condition. The water temperature has reached 118° F (≅47.8° C). The entire system is disabled.

Contact your local Authorized Dimension One Spas Dealer, or authorized service center.

If you have flashing lights, but the Digital Display Window shows the current water temperature, you have a water flow problem. You will need to check the water level and/or clean the filters.

The flashing lights should stop once the problem is fixed. If the problem persists, reset the power to the spa by resetting the GFCI breaker.

If the error is not resolved after resetting the spa, contact your local Authorized Dimension One Spas Dealer, or authorized service center.

Extreme Temperature on the Display

Do not enter the water if you see a temperature reading of 32° F (≅0° C) or 136° F(≅57.8° C) without first checking the actual water temperature with a certified thermometer. The system has detected a Temperature Probe Failure and the water may be too hot, or too cold, to safely use.

Contact your local Authorized Dimension One Spas Dealer, or authorized service center.

Ice

When **ICE** appears in the Display Window, the air temperature has dropped below a factory-preset level, and the system has activated "**Smart Winter Mode**." The pump will automatically run to circulate the water and prevent it from freezing.

This is a normal function and no action is necessary.

Programming the Digital Control Panel

Program Button

To enter the programming mode, press and hold the Program button for 5 seconds. Each time you press the button you'll move to the next step of the programming sequence.

Programmable Item	Program Button Action
Clock	Press and hold for 5 seconds
Filter Cycle Start Time	2nd press
Filter Cycle Duration	3rd press
Number of Filter Cycles	4th press
Pump Run Time	5th press
Temperature Unit	6th press
Quit Program Sequence	7th press, or wait 60 seconds

To exit the programming sequence before the end, just wait for 60 seconds without touching any buttons.

Clock

When you enter Programming mode, the clock appears with the Hour flashing. Use the **UP** or **DOWN Buttons** to set the HOUR.

When the HOUR is correct, press the **LIGHT Button** to move to the MINUTES setting.

Use the UP or DOWN Buttons to set the minutes, the press Light to move to the **AM/PM** setting. Use the Up or Down buttons to select AM or PM. Then press the Program button to move on to the next step.

Filter Cycle Start Time:

When you press the Program button the 2nd time, the Filter Icon appears in the Display Window to indicate that you are setting the **Filter Cycle Start Time.**

Use the Up and Down buttons and the Light button to set the Filter Cycle Starts time just as you did in setting the Clock (see above).

Filter Cycle Duration

Pressing the Program button the third time brings you to the **Filter Cycle Duration.** This tells your spa how long to run during each filter cycle.

Use the **UP** or **DOWN Buttons** to choose from 10, 20, 30, 40, 50, or 60 minutes. *The factory default is 10 minutes*.

Number of Filter Cycles:

Pressing the Program button the fourth time brings you to the **Number of Filter Cycles** that your spa will run each day.

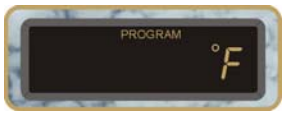
Your choices are 1, 2, 3, or 4 cycles per day. *The factory default is 2 times per day.*

NOTE: Long and/or numerous filter cycles could cause overheating of the hot tub - especially in hot climates.

Pump Run Time

Pressing the Program button the fifth time brings you to the **Filter Pump Run Time.** Push the UP or DOWN Button to choose 60, 90, 120, 150, or 180 minutes. This sets how long the pump will run when a Jets Button is pushed, before shutting off automatically. The pre-set factory default is 60 minutes.

Temperature Units (ºF or ºC)



Pressing the Program button the sixth time brings you to the **Temperature Unit** selection.

Use the **UP** or **DOWN Buttons** to choose Fahrenheit (ºF) or Celsius (ºC). *The factory default setting is Fahrenheit.*

Press the Program Button a seventh time to finish and exit the programming sequence.

HydroSport™ Swim System

Important Safety Instructions

If *speed* is your goal, the Swim Tether allows you to swim as fast as you want and remain stationary.

Never let children play with the Swim Tether Cord. They could get the cord wrapped around their neck and suffocate.

Do not allow your Tensor Cords to remain in direct sunlight for extended periods of time. Exposure to direct sunlight for extended periods of time can cause the Tensor Cords to deteriorate. Deteriorated, or damaged, Tensor Cords could break and cause injury if the break should occur during use.

Be sure to examine your Tensor Cords for damage or deterioration prior to each use. Do not use damaged or deteriorated Tensor Cords.

Do NOT adjust any piece of HydroSport equipment too tightly! If a piece is too tight it might not release in the event of an emergency.

Swimming in your Aquatic Fitness System (AFS) requires that you follow swimming safety precautions. Your AFS offers a variety of exercises that require awareness of many safety and health precautions.

Using the Swim Tether

The HydroSport™ Swim Tether system that comes with the AFS provides multiple stationary exercises.

The Swim Tether system includes a 7-foot Swim Tether Pole, an adjustable Swim Tether Belt, and 7 feet of Swim Cord.

The belt snaps easily around your waist using a quick-release buckle and adjusts from the back.

Swim Tether Mounts are located at either end of the AFS (see picture at left). Place the pole in the mount, strap on the adjustable belt and adjust the cord length.

Using the Swim Kick Bar

A swim kick bar at the end opposite the steps comes standard on all the AFS models.

Use this bar as you would the edge of a pool to do kicking or standing exercises.

Using the Swim Jets

The swim jets in your Aquatic Fitness System are adjustable, allowing you to get the most out of your exercise.

When swimming, use the tile markers on the side, front and bottom of the spa to properly position yourself in the swim lane. You can also use the swim jets for resistance to while walking or jogging in place.

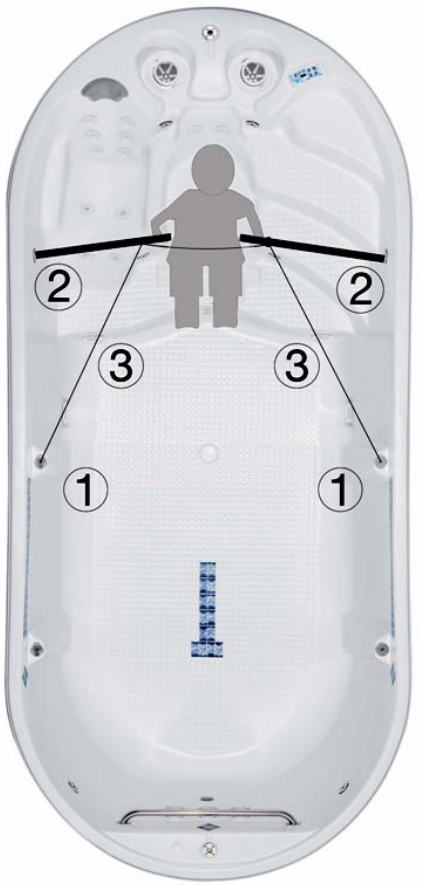
Using the Diverter Valve

The diverter valve at the filter end of the AFS controls water movement from Pump 1. Turn the valve to direct water flow either in the direction of the hydrotherapy or swim jets.

Adjusting Air Flow

The air valves located at the front of the AFS control the amount of air added to the water. The window in the air valve informs you of the amount of air being mixed with the water at the swim jets.

Optional HydroSport™ Rowing System



Installing the Rowing System

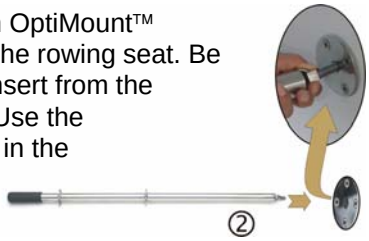
Easy as 1-2-3

The *HydroSport*™ Rowing System installs in three steps:

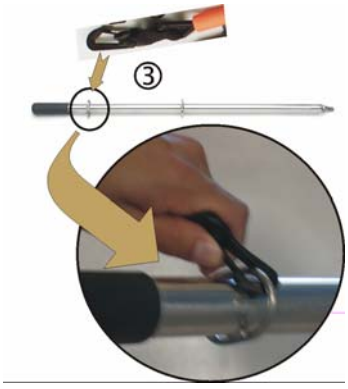
1) Install Butterfly Tops
2) Install Rowers
3) Install Tensor Cords

1) Screw a Butterfly Top into the OptiMount™ located on top of the pedestal closest to the rowing seat or area. Be sure to remove the plastic insert from the OptiMount™ center. Use the OptiMounts identified by "1" in the 1-2-3 picture.

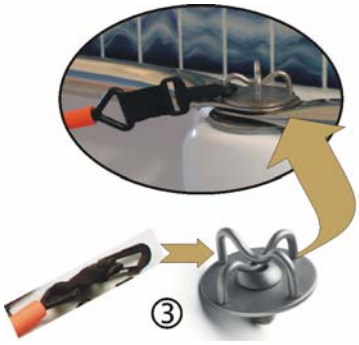
2) Screw each rower into an OptiMount™ on the wall on each side of the rowing seat. Be sure to remove the plastic insert from the center of the OptiMount™. Use the OptiMounts identified by "2" in the 1-2-3 picture.



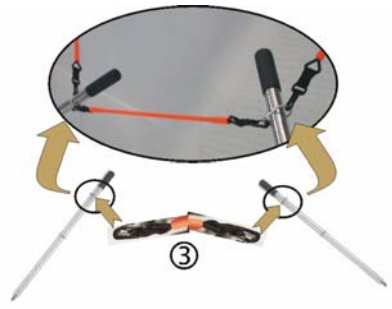
3) Choose a tensor cord for your rowing exercise. Snap a clip from one end of the rower to a Butterfly Top. Snap the other end of the cord to the rower.



As a starting point use the red cords. Change colors to adjust resistance as you determine your needs.



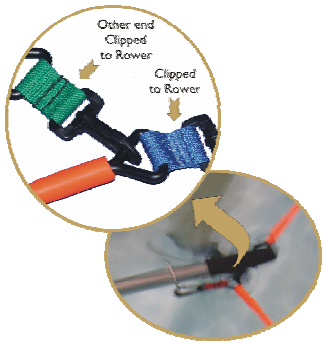
You must make sure the cord snap-hooks are properly connected and the rower ring and the Butterfly Top ring are completely "inside" the snap-hook. If not properly installed, the tension on the cords during exercise could cause them to release and become a safety hazard.



The color of the cords corresponds to the length. In order of longest to shortest: black, red, yellow, blue and green.

Take a shorter cord and attach it between the rowers by snapping one end of the cord to a ring on each rower.

You may also snap the clip into the cord clip instead of the rower's ring. This provides additional distance between your hands and the cord.



Warning

Adding the cords between the rowers is necessary to maintain control of the rowers. Without the cord, the rowers swing back toward the walls and can cause injury or damage.

Feature

The rowers are designed with four separate connection rings allowing you the option of multiple Tensor Cords that offer a wide range of exercises.

A variety of OptiMount™ locations allow for installation of additional Butterfly Tops for more cords. The addition of various lengths of cord provide many ways to customize your exercise.

Rowing for the First Time

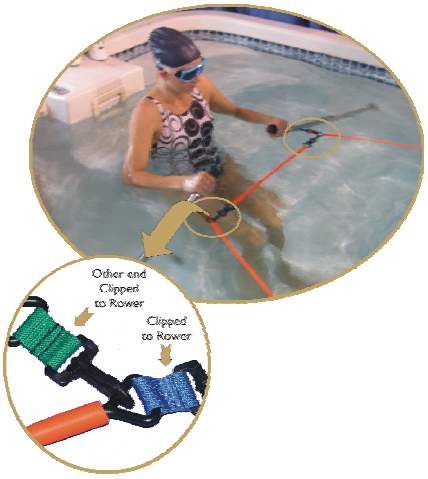
Using the Rower

Warning

Double-check the HydroSport™ Rower, making sure that it is still screwed into the mount securely but remains loose enough to self-align during use.

Sit in the rowing seat, or step, and grasp the rower handles, to begin your rowing exercise.

If the tensor cord between the rowers is too close to your hands, reconnect it to the D-rings on the cords connected to the Butterfly Tops on the AFS side – as shown in this picture.



Connecting the HydroSport™ Body Belt

The adjustable HydroSport™ Body Belt provides another option for creating a customized exercise program.

Snap a HydroSport™ tensor cord into a D-ring on the belt and connect the other end of the cord to a Butterfly Top. Wrap the belt around your waist, snap the buckle into place, and adjust the belt to fit comfortably. Do not make it too tight, because it could hinder a quick release or alter your exercise routine.

Connecting the HydroSport™ Ankle/Wrist Cuffs

The adjustable HydroSport™ Ankle/Wrist Cuffs provide another option for creating a customized exercise program.

Wrap the cuff around your wrist or ankle and adjust the cuff to fit you comfortably.

Be sure it fits firmly. If the cuff comes loose during your exercise, you or your partner could be injured.

Snap a HydroSport™ tensor cord into the D-rings on the cuff and connect the other end of the cord to a Butterfly Top in an OptiMount™.

Connecting the HydroSport™ D-handles

Snap a HydroSport™ tensor cord into the D-Ring of a D-handle and connect the other end of the cord to a Butterfly Top installed in an OptiMount™.

Connecting the HydroSport™ Bar Straps

If you want to connect the Body Belt or the D-handles but all of the OptiMounts™ are in use, the HydroSport™ Bar Straps can be used to connect them to an exercise bar. Wrap the strap around the bar, as shown, and pull it snug. Snap a HydroSport™ tensor cord into a D-Ring on the Body Belt or the D-handle. Connect the other end of the cord to the strap installed around an exercise bar.

HydroSport™ Exercise Bars

Installing the Stationary Exercise Bars

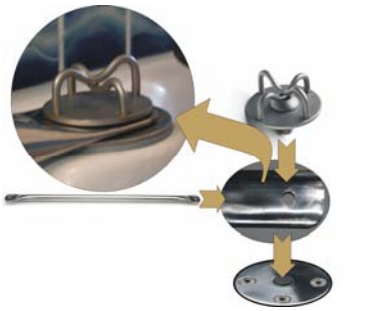
Exercise Locations

The AFS design contains multiple OptiMount™ locations for rapid installation of HydroSport™ equipment in a variety of locations and combinations.

Connecting the Exercise Bars

The Exercise Bars connect to the AFS OptiMounts™ using Butterfly Tops. Push the Butterfly Top screw through the hole in the end of the bar and screw it into the OptiMount™. Repeat for the other end of the bar.

If two bars connect to the same OptiMount™, line up the holes on the bars, insert the Butterfly Top and connect to the OptiMount™.



HydroSport™ Aquatic Fitness Bar

Installing the Aquatic Fitness Bar

Snap one end of the tensor cord to the Butterfly Top. The other end of the cord snaps on one end of the Aquatic Fitness Bar. Repeat for the other end of the bar. The bar can connect to the same OptiMount™ because the design accomodates multiple pieces of gear.

Routine Equipment Maintenance

Draining Your System

Your system does not need a pump to drain. To drain the system, turn off the power at the GFCI (see Initial Startup section for details, pg. 5) and locate the hose bibs inside the equipment compartment (the spigots that you attach to a garden hose). Remove the caps from the hose bibs. Screw a garden hose onto one of the hose bibs, put the other end of the hose in a safe place for water run-off (do not drain onto lawn or plants), and turn the valve on the side of the hose bib to release the flow of water. After it drains, do the same with each of the other hose bibs. Don't forget to close the valves again before you re-fill the system. For information about how often you should drain and refill your system, refer to the Water Care Guide that came with the system.

Filter Cleaning

Important: To prevent debris from getting into the system during filter cleaning, shut off the power at the GFCI. See Initial Startup section on page 5 of this manual for details on the GFCI.

Your system has two topside filters, if you have the Dual-Temp model; the separate spa area has a third topside filter. See photos at right. To clean the filter, lift the center float of the skimmer assembly until it reaches full extension. Then turn it counterclockwise until the flats of the basket line up with the securing tabs. Pull the basket assembly straight up to remove it.

Two-filter models

Three-filter (Dual Temp)

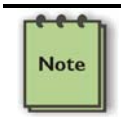
Remove the filter below the basket by twisting it 1/4 turn counterclockwise to its stop. Lift the filter out of its canister. Clean the filter with a high-pressure garden hose. Every other cleaning, soak the filter in filter-cleaning solution and rinse it thoroughly. Reinstall the filter by reversing the removal process, replace the skimmer basket assembly. Turn the power back on at the GFCI breaker. Run the pump a few minutes at high speed before leaving the system in its normal heating mode. We recommend that you clean the filters every month as preventative maintenance.

Light Replacement

1. Turn the power off at the GFCI breaker and drain the water to below the level of the light.
2. Using the special tool provided in the owner's manual packet, unscrew the lens that covers the light housing.

Do not attempt to remove the lens without draining the water to below the level of the light. Do not attempt to remove the lens without the special tool it will break the seal on the light, causing leakage and voiding your warranty. If you have lost it, contact Dimension One Spas Service Department to have one sent.

3. Remove the old bulb and install the new bulb.
4. Use the special tool to replace the lens on the light housing.
5. Turn the light on and off to make sure it works before refilling the system.



Be sure the rubber O-ring behind the lens does not have damage and is positioned properly when replacing the lens. Contact Dimension One Spas if you need a replacement O-ring.

Surface Care

Use a cheesecloth rag, or other soft rag, to clean the entire shell surface with water line cleaner or a similar product from your spa dealer. You may also use ph/Alkalinity Increaser or a 50/50 solution of denatured alcohol and water. Be sure to thoroughly rinse the shell after cleaning. To restore the luster of the shell after cleaning use Poli-Gloss or a similar product from your spa dealer.

Do not use 409 type cleaners or other caustic solutions as they may damage the shell surface and void the warranty. If you are use baking soda to clean your hot tub shell, be careful not to get it on the wood skirt. It bleaches the wood.

Do not use citrus-based cleaners on the shell surface.

Care for the Wood Cabinet

When properly cared for, the wood cabinet of your system will maintain its beauty for many years. Wood reacts to the elements by expanding and contracting. To protect your wood finish, re-stain it every 3-6 months with Redwood or Coastal Gray Stain, which seals the wood. Please note that the cabinet is not warranted against reaction to natural weather conditions. Check with your spa dealer for wood maintenance products.

Care for TimberLite Cabinets

To maintain the original appearance of the TimberLite cabinet, clean periodically with any non-abrasive household cleaner. Should the TimberLite cabinet become stained, use the 3M Graffiti Remover System to remove the stain.

Special Cold Weather Instructions

Dimension One Spas design allows for year-round use. The insulation allows for energy efficiency and protection of the plumbing and equipment when the system remains operational. The system has a "Smart Winter" freeze protection mode to circulate water during freezing weather, assuming the system has electrical power and the proper water level. Therefore, keeping your system operational provides your best defense against freeze damage. However, if you live where freezing conditions exist and you cannot avoid shutting down your spa for the winter, or where conditions may get too cold for the spa's "Smart Winter" mode to prevent freezing, have your spa Winterized by a professional Dimension One dealer or authorized service representative. **Only draining your spa will not prevent freeze damage, because small amounts of water in the plumbing can expand and damage the system.**

Your warranty does not cover draining or winterizing, so only allow a professional to Winterize your spa if it becomes necessary.

Your system has automatic freeze protection. However, a power outage can cause your equipment to freeze quickly. During freezing conditions, check your system frequently to ensure proper operation. Always check your system after any power failure to ensure that it remains operational.

Springtime Startup of a Winterized System

If your spa has been Winterized, Dimension One highly recommends that you contact an authorized dealer to restart it. The following is an outline of the procedures involved.

- Make sure o-rings for pumps are in place and undamaged.
- Make sure all the fittings that loosened are re-tightened.
- Replace all jet fittings, pump drain plugs, hose bib drains, and bleeder valves
- Fill the system with water in the normal way
- Turn the power back on.
- Run the jets on high speed for about 15 minutes.
- Drain the water.
- Put the filter(s) back in.
- Refill the system and treat chemically as one would after a normal water change

For more information about Winterizing your system, or restarting a Winterized system, please contact your local Authorized Dimension One Spas dealer.

Troubleshooting Guide

Heating System

Symptom	Problem	Corrective Action
Does not heat	1. Temperature setting is too low	1. Turn up the thermostat
	2. Dirty filter	2. Clean filter
	3. Flow switch out of adjustment	3. Call for service
Too hot	1. Temperature setting is to high	1. Turn down the thermostat
	2. High limit tripped	2. Call for service
Flashing temperature of 34°F or 134°F appears on the display	Possible temperature sensor failure	Call for service

Electrical System

Symptom	Problem	Corrective Action
Will not turn on – in any mode	No power	Check circuit breaker and/or GFCI
Turns on by itself	Normal automatic daily power filtration, or anti-freeze cycle	No action required
Light will not turn on	Burned out bulb	Replace bulb
Pump shuts down unexpectedly while in use	1. Automatic timer has shut pump off	1. Push JETS button to start another cycle. If desired reprogram automatic pump timer for a longer duration.
	2. Motor over-heated and automatic protective device has shut down pump(s)	2. If pump(s) will not restart when JETS pad is pushed, call for service
3 flashing lights appear on the Control Panel	Possible sensor errors	1. Check water level
		2. Clean filter
		If problem persists:
		1. Turn off power
		2. Restart the system
		If problem persists:
		Call for service

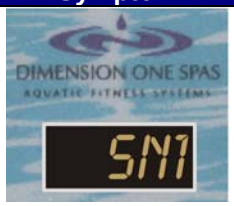
Water System

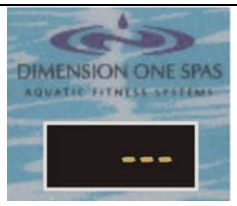
Symptom	Problem	Corrective Action
Pulsating jets	Water level too low	Fill with water to approximately 6 inches below the top edge of the pool/spa
No Jet Action, or action is poor	1. HydroTherapy Jets closed	1. Open Jets
	2. Diverter Valve turned	2. Turn the Diverter Valve clockwise or counter clockwise
	3. Dirty Filter	3. Clean Filter
	4. Air lock	4. Loosen pump union to allow air to escape
	5. Gate valve closed	5. Open gate valve
The water is cloudy or has a smell	The water has a chemical imbalance or lack of filtration.	1. Check TA/pH
		2. Test and adjust
		3. Change Water if necessary

Self-Diagnostic System

"Pool-Side" Control Panel

If one of the following messages appears in the Pool Side control panel, take the corrective action described below.

Symptom	Problem	Corrective Action
	**Non-functional High Temperature Sensor:** Open high temperature sensor. Heater is deactivated.	Call your dealer for service.
	Non-functional temperature sensor: Open temperature sensor. Heater is deactivated.	Call your dealer for service.
	Water Flow Problem: Pressure switch is not closed when the pump is activated. Heater is deactivated. Proper flow of water is inhibited or pressure switch has malfunctioned. Check for proper water level, ensure pump is primed and/or check for clogged filter. Pressure switch may need to be adjusted.	Call the dealer for service.
	Pressure switch problem: Pressure switch is closed, while pump is deactivated. Pressure switch may need to be adjusted.	Call your dealer for service.
	Cool condition: If the water temperature drops 20°F (≅11°C) below the set temperature, the low speed pump and the heater will activate to bring the temperature within 15°F (≅8°C) of the set temperature.	No corrective action is required.
	Freeze condition: **Do not enter the spa water.** A potential freeze condition has been detected (55°F / ≅12°C.)	No action is required. The low speed pump will be activated along with the heater. The spa will automatically heat, until the spa is out of danger (65°F / ≅18.3°C.)

Symptom (Cont)	Problem	Corrective Action
	High temperature condition: **Do not enter the spa water.** The water temperature is above acceptable limits. Water temperature has reached 110°F (≅43°C.)	Call your dealer for service.
	**High limit condition:** **Do not enter the spa water.** The water temperature has reached 118°F (≅47.8°C.) The entire system is disabled.	Call your dealer for service.

AquaFit™ Dual-Temp (Spa-Side)

Symptom	Problem	Corrective Action
	"OH" on LED Digital Display Window **High Temperature Condition:** **Do not enter spa water**. The water temperature is above acceptable limits. The water temperature has reached 110°F (≅43.3°C.). The system will shut down.	Remove the cover and allow the water to cool. Reset the power to the spa by resetting the GFCI breaker. No further action is required unless the water temperature fails to return to acceptable levels – in which case, call your dealer for service.
	3 Flashing Lights AND **"OH" on LED Digital Display Window** **High Limit Condition:** **Do not enter spa water.** The water temperature is above acceptable limits. The water temperature has reached 118°F (≅47.8°C.). The system will shut down.	Call your dealer for service.
	3 Flashing Lights **System Error:** 1. Check the water level 2. Clean the filters. 3. If the problem persists, reset the power to the spa by resetting the GFCI breaker.	If the error is not resolved after resetting the spa, call your dealer for service.
	Temperature Probe Failure: If the LED Digital Display shows 32°F (≅0°C) or 136°F (≅57°C), you have an open temperature sensor. The heater is deactivated.	Call the dealer for service.

DIMENSION ONE SPAS

A Higher Degree of Indulgence.

2611 BUSINESS PARK DRIVE VISTA, CA 92081

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P/N 01533-0037 Rev D

Doc # 1536 Rev D